A Review Of Climate Basics

Skepticism is the first step to Truth – D. Diderot

Albemarle County BOS

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presentation

by

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As Carbon Dioxide Levels Have Risen Evidence-Based Science Confirms...

- Global temperatures in 2012 are at the satellite era mean, with 12 plus years of no increase, and with several recent years of decrease
- Sea ice area is at the satellite era mean
- Satellite data show that sea level has not risen for several years, and is presently lower than the historical average rate of rise
- Seven years since a major hurricane strike on the
 US the longest period on record

Evidence-Based Science Continued....

- Seven years since a hurricane strike on Florida
 - the longest period on record
- No long-term trend in severe tornadoes
- US drought area below the long-term mean
- Polar bear populations flourishing

Your Life Depends On Plant Life; Plant Life Depends On Carbon Dioxide The Basic Equation of Plant Life $6CO_2 + 6H_2O \rightarrow C_6H_{12}O_6 + 6O_2$

chlorophyll + light + nutrients

Plants Convert Atmospheric Carbon
Dioxide Plus Water In The Presence
of Plant Chlorophyll Into
Carbohydrates And Oxygen

Carbon Dioxide Is Not A Pollutant

Benefits From Increased CO2

55 Benefits of Atmospheric CO₂ Enrichment

Air Pollution Stress (Non-Ozone) Air Pollution Stress (Ozone) **Avoiding Human Starvation and** Plant and Animal Extinctions Bacteria Biodiversity **Biogenic Volatile Organic Compounds** Biomass Ca Plants **CAM Plants** Carbon Sequestration Diseases of Plants Early Growth **Earthworms** Evolution **Flowers** Fluctuating Asymmetry Glomalin **Health-Promoting Substances** Herbivory Hormones **Human Longevity Human Mortality (All Causes)** Human Mortality (Cardiovascular) **Human Mortality (Respiratory)** Iodocompounds Isoprene **Light Stress**

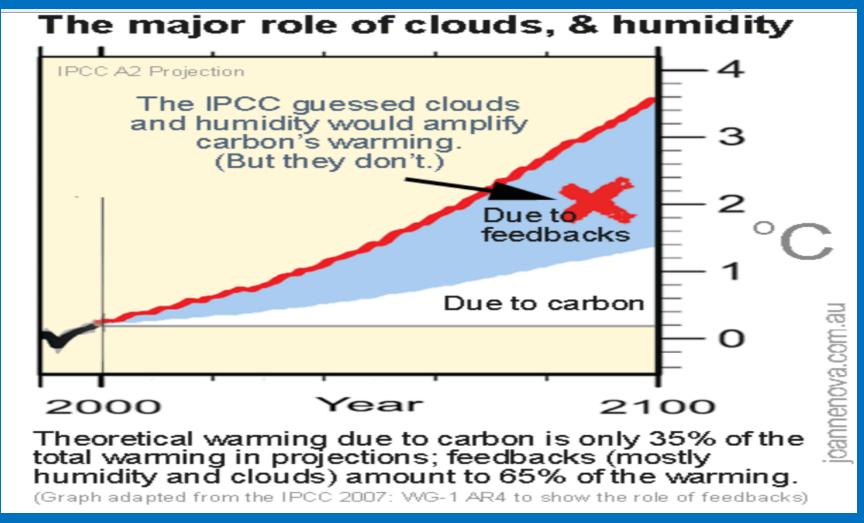
Lipids **Medicinal Plants** Monoterpenes Nectar **Net Primary Productivity** Nitrogen Fixation **Nutrient Acquisition Phosphorus Acquisition** Photosynthesis **Progressive Nitrogen Limitation** Reactive Oxygen Species Root Exudation **Root Production** Salinity Stress Seeds Soil Erosion Soil Toxicity Starch Tannins **Temperature Stress** Thylakoid Membranes Transpiration **UV-B Radiation Stress Vegetative Storage Proteins** Water Stress Water-Use Efficiency Weeds **Wood Density**

The Question: "to what extent the temperature rise in the past 100 years was a trend or a natural fluctuation."

The Answer:"only a marginal anthropogenic contribution cannot be excluded,"

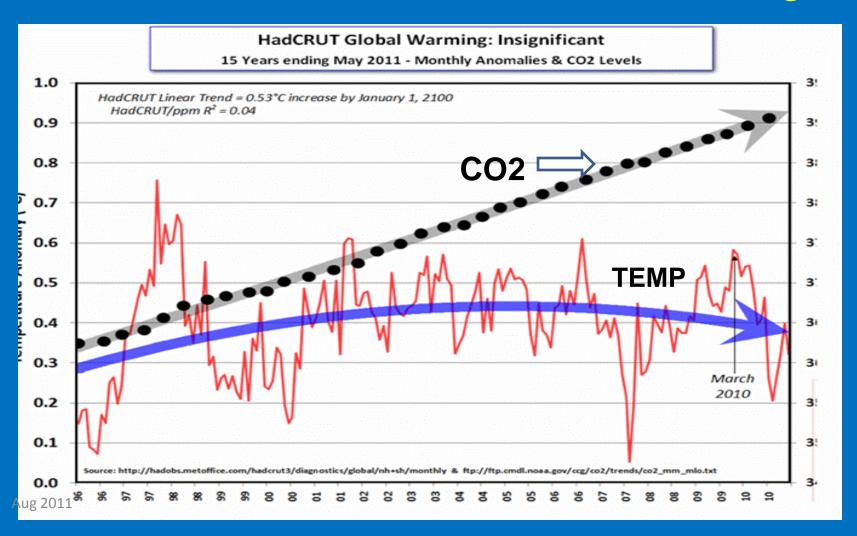
Ludecke, H.-J., Link, R. and Ewert, F.-K. 2011. How natural is the recent centennial warming? An analysis of 2249 surface temperature records. *International Journal of Modern Physics C* 22: 10.1142/S0129183111016798.

IPCC Computer Models vs. Fact



Credit: joannenova.com.au

Past 15 Years: CO2 *Up*; Global Temperatures *Down*Why The Panic Over Emissions? *Does Increased CO2 "Cause" Global Cooling?*



Albemarle County Comprehensive Plan

The county adopted a comprehensive plan in 1980 that designated 5 percent of its land to be used for dense residential and commercial use. Development is discouraged in the rest of the county in order to preserve environmental resources.

At what cost? Was cost even considered?

The Tree Environment Is Flourishing

- Forests in the eastern United States appear to be growing faster than they have in 225 years in response to rising levels of carbon dioxide in the atmosphere...
- On average, the stands were expanding at a rate of two extra tons of mass per acre per year, by the end of the study — the equivalent of a single two-foot-diameter tree..."

Sean M. McMahon, Geoffrey G. Parker, Dawn R. Miller Smithsonian Environmental Research Center, Forest Ecology Group, Edgewater, MD 21307-0028; Center for Tropical Forest Science, Smithsonian Tropical Research Institute Feb. 2010

"Planet Under Pressure" International Conference, April 2012, London

Yale University professor Karen Seto told MSNBC: "We certainly don't want them (humans) strolling about the entire countryside. We want them to save land for nature by living closely [together]"

...Sounds in keeping with the Albemarle County comprehensive plan and the TJPDC sustainability accords

The Real Costs Of Sustainability Dogma...A Lesson From California

"California's housing had been nearly as affordable as the rest of the nation until the more restrictive regulations, such as development moratoria, urban growth boundaries, and overly expensive impact fees came into effect starting in the 1970s. Other economic studies, such as by Stephen Malpezzi at the University of Wisconsin, also have documented the strong relationship between more intense land-use regulations and exorbitant house prices" *

...And you wonder why many workers cannot afford to live in Albemarle County?

* WSJ, April 6, 2012: "California Declares War on Suburbia" by W. Cox